

Water-Data Report 2008

#### 08099400 Proctor Lake near Proctor, TX

Little Basin Leon Subbasin

LOCATION.--Lat 31°58'07", long 98°29'09" referenced to North American Datum of 1927, Comanche County, TX, Hydrologic Unit 12070201, in intake structure at Proctor Lake on Leon River, 2.0 mi upstream from U.S. Highways 67 and 377, 3.5 mi west of Proctor, and 228.1 mi upstream from mouth.

DRAINAGE AREA.--1,259 mi<sup>2</sup>.

#### SURFACE-WATER RECORDS

PERIOD OF RECORD.--Jan. 1963 to Sept. 2000 (contents furnished by U.S. Army Corps of Engineers), Oct. 2000 to Sept. 2002 (contents), Oct. 2002 to current year. Prior to Oct. 1970, published as "Proctor Reservoir". Water-quality records: Chemical data: Jan. 1964 to July 1982, Jan. 1990 to Aug. 1997. Biochemical data: Jan. 1964 to July 1982, Jan. 1990 to Aug. 1997.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to May 28, 1963, nonrecording gage at same site and datum. Satellite telemeter at station

COOPERATION.--Records of diversions may be obtained from the U.S. Army Corps of Engineers.

REMARKS.--Records good. Intermittent missing record is the result of instrument malfuction. The lake is formed by a reinforced concrete gated structure and rolled earthfill dam, total length 13,460 ft. The lake was operated as a detention basin from Jan. 30 to July 5, 1963. The gates were closed July 6, 1963, but the lake was operated as a detention basin to elevation 1,156.0 ft until construction was completed. Deliberate impoundment began Sept. 30, 1963. The spillway is a gated concrete gravity structure located on the left bank, with an ogee weir section and basin. The spillway is controlled by eleven 40.0- by 35.0-foot tainter gates. The spillway was designed to discharge 431,800 ft<sup>3</sup>/s at an elevation of 1,201.0 ft. The lake is operated for flood control and water conservation. Inflow is partly regulated by Leon Reservoir (station 08099000, conservation pool storage 26,420 acre-ft). Inflow is also affected at times by discharge from the flood-detention pools of 23 floodwater-retarding structures with a combined detention capacity of 43,690 acre-ft. These structures control runoff from 172 mi<sup>2</sup> in the Leon River and Rush Creek drainage basins. Borrow is not included in capacity totals. The dam is owned by the U.S. Army Corps of Engineers. Conservation pool storage is 55,590 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,206.0
Design flood	1,201.0
Top of gates	1,197.0
Crest of spillway (top of conservation pool)	1,162.0
Lowest gated outlet (invert)	1,128.0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 383,100 acre-ft, May 2, 1990, elevation, 1,197.63 ft; minimum since first filling of lake, 6,090 acre-ft, Oct. 28, 2000, elevation, 1,142.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,164.71 ft, Mar. 23; minimum elevation, 1,158.33 ft, Sept. 30.

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# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008 DAILY MEAN VALUES

	DAILY MEAN VALUES												
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1	1,162.87		1,161.85	1,161.74	1,161.68	1,161.65	1,163.33	1,163.31	1,161.63	1,160.48	1,159.14	1,158.74	
2	1,162.77		1,161.87	1,161.72	1,161.68	1,161.63	1,163.14	1,163.20	1,161.58	1,160.43	1,159.11	1,158.73	
3	1,162.69	1,162.00	1,161.86	1,161.71	1,161.68	1,161.77	1,162.96	1,163.07	1,161.52	1,160.38	1,159.07	1,158.70	
4	1,162.61	1,161.99	1,161.85	1,161.70	1,161.68	1,161.73	1,162.88	1,162.89	1,161.44	1,160.33	1,159.02	1,158.61	
5	1,162.54	1,161.98	1,161.84	1,161.70	1,161.70	1,161.73	1,162.71	1,162.76	1,161.35	1,160.27	1,158.98	1,158.56	
6	1,162.49	1,161.97	1,161.83	1,161.70	1,161.71	1,161.78	1,162.58	1,162.65	1,161.33	1,160.21	1,159.15	1,158.52	
7			1,161.83						1,161.27		1,159.29	1,158.49	
8	-	-	1,161.84	-	1,161.70				1,161.21		1,159.27	1,158.47	
9	1,162.38	1,161.91	1,161.85	1,161.71	1,161.69				1,161.17		1,159.23	1,158.60	
10	1,162.33	1,161.90	1,161.82	1,161.71	1,161.69	1,161.81	1,162.30	1,162.32	1,161.12	1,160.08	1,159.19	1,158.70	
11	1,162.30	1,161.89	1,161.83	1,161.70	1,161.68	1,161.82	1,162.27	1,162.28	1,161.05	1,160.02	1,159.17	1,158.77	
12	1,162.27	1,161.89	1,161.85	1,161.70	1,161.70	1,161.82	1,162.26	1,162.19	1,160.98	1,159.97	1,159.16	1,158.79	
13	1,162.23	1,161.89	1,161.83	1,161.69	,	,	,	,	1,160.94	,	1,159.12	1,158.81	
14	1,162.20	1,161.89	1,161.83	1,161.69	1,161.69	1,161.84	1,162.20	1,162.20	1,160.89	1,159.91	1,159.08	1,158.78	
15	1,162.25	1,161.85	1,161.84	1,161.68	1,161.71	1,161.84	1,162.15	1,162.27	1,160.84	1,159.87	1,159.05	1,158.74	
16	1,162.25	1,161.82	1,161.82	1,161.67	1,161.73	1,161.81	1,162.10	1,162.24	1,160.78	1,159.83	1,159.04	1,158.70	
17	1,162.23	1,161.81	1,161.81	1,161.67	1,161.73	1,161.81	1,162.10	1,162.21	1,160.73	1,159.79	1,159.03	1,158.67	
18	1,162.23	1,161.80	1,161.81	1,161.66	1,161.72	1,162.05	1,162.12	1,162.19	1,160.67	1,159.75	1,159.02	1,158.64	
19	1,162.18	1,161.79	1,161.81	1,161.66	1,161.71	1,163.14	1,162.09	1,162.16	1,160.61	1,159.69	1,159.03	1,158.62	
20	1,162.16	1,161.78	1,161.81	1,161.63	1,161.71	1,164.05	1,162.07	1,162.13	1,160.84	1,159.64	1,159.06	1,158.59	
21	1,162.14	1,161.79	1,161.80	1,161.63	1,161.74	1,164.47	1,162.08	1,162.08	1,160.94	1,159.60	1,159.05	1,158.57	
22	1,162.19	1,161.78	1,161.80	1,161.65	1,161.73	1,164.67	1,162.08	1,162.03	1,160.93	1,159.56	1,159.02	1,158.54	
23	1,162.13	1,161.73	1,161.77	1,161.65	1,161.71	1,164.67	1,162.08	1,162.00	1,160.89	1,159.52	1,158.99	1,158.52	
24	1,162.13	1,161.76	1,161.77	1,161.64	1,161.72	1,164.56	1,162.38	1,161.97	1,160.83	1,159.46	1,158.98	1,158.50	
25	1,162.09	1,161.87	1,161.76	1,161.68	1,161.71	1,164.41	1,162.89	1,161.94	1,160.78	1,159.42	1,158.96	1,158.47	
26	1,162.07	1,161.87	1,161.76	1,161.71	1,161.71	1,164.27	1,163.01	1,161.89	1,160.71	1,159.39	1,158.93	1,158.44	
27	1,162.07	1,161.87	1,161.75	1,161.70	1,161.68	1,164.13	1,163.15	1,161.85	1,160.66	1,159.34	1,158.89	1,158.42	
28	1,162.06	1,161.87	1,161.76	1,161.70	1,161.67		1,163.38		1,160.60		1,158.86	1,158.39	
29	1,162.06	1,161.86	1,161.75	1,161.71	1,161.66		1,163.49		1,160.57		1,158.83	1,158.37	
30	1,162.04	1,161.85	*	1,161.69		1,163.63	1,163.41	-	1,160.53		1,158.80	1,158.35	
31			1,161.75	1,161.69		1,163.46		1,161.68		1,159.19	1,158.77		
Mean					1,161.70						1,159.04	1,158.59	
Max			-	1,161.74					1,161.63			1,158.81	
Min			1,161.75	1,161.63	1,161.66	1,161.63	1,162.07	1,161.68	1,160.53	1,159.19	1,158.77	1,158.35	

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